REMARKS

The Examiner rejected claims 1-4, 7, 8 and 10 under 35 U.S.C. §103(a) as allegedly being unpatentable over Robinson *et al.* (hereinafter "Robinson"), "A framework for interacting with paper", Eurographics '97, Volume 16, Number 3 - [www.cl.cam.ac.uk/Research/Origami/Origami1997c/index.html], pages 1-9 in view of Musk *et al.* (hereinafter "Musk"), US 6,148,260 continuation filed 11/8/1996.

The Examiner rejected claims 5-6, 9, 18-25 and 31-38 under 35 U.S.C. §103(a) as allegedly being unpatentable over Robinson *et al.* (hereinafter "Robinson"), "A framework for interacting with paper", Eurographics '97, Volume 16, Number 3 - [www.cl.cam.ac.uk/Research/Origami/Origami1997c/index.html], pages 1-9 in view of Musk *et al.* (hereinafter "Musk"), US 6,148,260 continuation filed 11/8/1996 and Thompson *et al.* (hereinafter "Thompson"), US 5,986,401 patented 11/16/1999.

Applicant respectfully traverses the §103 rejections with the following arguments.

35 U.S.C. §103(a)

Claims 1-4, 7, 8 and 10

The Examiner rejected claims 1-4, 7, 8 and 10 under 35 U.S.C. §103(a) as allegedly being

unpatentable over Robinson *et al.* (hereinafter "Robinson"), "A framework for interacting with

paper", Eurographics '97, Volume 16, Number 3 -

[www.cl.cam.ac.uk/Research/Origami/Origami1997c/index.html], pages 1-9 in view of Musk *et*

al. (hereinafter "Musk"), US 6,148,260 continuation filed 11/8/1996.

Applicant respectfully contends that claim 1 is not unpatentable over Robinson in view of

Musk, because Robinson in view of Musk does not teach or suggest each and every feature of

claim 1.

As a first example of why claim 1 is not unpatentable over Robinson in view of Musk,

Robinson in view of Musk does not teach or suggest the feature: "defining the referenced item in

the electronic document, **said electronic document not being derived from the physical**

document; determining geographic coordinates of the referenced item; defining the geographic

link to the physical document; and encoding the geographic coordinates in the geographic link"

(emphasis added).

Applicant notes that the abstract in Robinson recites: "This paper reports on ways of

using digitised video from television cameras in user interfaces for computer systems. The

DigitalDesk is built around an ordinary physical desk and can be used as such, but it has extra

capabilities. A video camera mounted above the desk, pointing down at the work surface, is used

to detect where the user is pointing and **to read documents that are placed on the desk.**" (emphasis added), which clearly teaches deriving an electronic document from a physical document..

The Examiner argues: "Robinson teaches wherein the electronic document is not derived from the physical document in section 3, 4, 4.1, and 4.4. Robinson describes here that animated documents are created with a fairly conventional WYSIWYG editor. Thus, the electronic document is created with electronic document editing software and thus is not necessarily derived from a physical document. Robinson does disclose further than the electronic document can additionally be derived by scanning conventional printed documents, however this is in addition to creating the electronic document via electronic document creation software"

In "Response To Arguments" with respect to Section 4.1, the Examiner argues: "Robinson teaches inn section 4.1 that the animated documents may be created with a WYSIWYG editor, or in other words and electronic document editor."

In response with respect to Sections 4.1 and 3, Applicant respectfully contends that Section 4.1 of Robinson first describes the use of a conventional WYSIWYG editor to create an animated document as is known in the prior art: "Animated documents are created with a fairly conventional WYSIWYG editor. Text and diagrams are entered and amended in the usual way, building up a collection of rendering information in primary pseudo-window leaves."

Robinson does not disclose that such a conventional WYSIWYG editor is used to create animated documents for Robinson's Registry in the absence of a corresponding physical document from which the electronic animated document is derived. Indeed, Robinson, Section 4.1 further recites: "One version of the editor actually operates on the DigitalDesk, which means

that text, diagrams and interactors from other printed documents can be copied into the new document. If the other printed documents are active documents known to the system, this copying is entirely digital, just as it would be in a conventional word processor."

In other words, Robinson does not disclose the use of a conventional WYSIWYG editor independent of a physical document from which the electronic animated document is derived, as confirmed by the following recitation the first paragraph of Robinson, Section 3: "The registry provides the central directory service for animated paper documents. **It stores the image of each active document** and the code of any interactors, together with cross references between these and indexes to identify them" (emphasis added). Since the registry stores **the image of each active document**, there is no electronic animated document in the Registry that is not derived from an associated physical document. Therefore, any use of the conventional WYSIWYG editor to create an animated document for the Registry generates content in the animated document that is derived from the corresponding physical document.

Moreover, the preceding quote from Section 3 of Robinson recites that the Register stores the cross references between the stored image (i.e., the electronic document in the Registry) and its associated physical document. Therefore, the referenced item in an animated document in the Registry, even if created by a conventional WYSIWYG editor, requires that the animated document be derived from the corresponding physical document as a prerequisite for considering the possibility of satisfying the following limitations of claim 1: "determining geographic coordinates of the referenced item; defining the geographic link to the physical document; and encoding the geographic coordinates in the geographic link".

In "Response To Arguments" with respect to Section 4, the Examiner argues: "In section

4 that an adaptor may be used to import or export hypertext. By enabling the registry to import

hypertext, Robinson is teaching that the document may have an electronic origin."

In response to the preceding argument by the Examiner relating to Section 4, Applicant

asserts that the hypertext is not a document, but rather is "text that includes links or shortcuts to

other documents, allowing the reader to easily jump from one text to related texts, and

consequentially from one idea to another, in a non-linear fashion. Coined by Ted Nelson in

1965" (see http://www.csgnetwork.com/glossaryh.html).

Moreover, Robinson, page 3, lines 23-26 recites: "The registry providing these directory

services thus lies at the centre of the system, acting as a long-term repository for representations

of printed documents and the interaction objects associated with them. Information is added to

the registry by direct editing or via an adaptor importing from some other form of hypertext".

Applicant accordingly asserts that "the interaction objects associated with them" comprise said

hypertext. Thus the hypertext, as interaction objects, is not a document.

In "Response To Arguments"with respect to Section 4.4, the Examiner argues:

"Furthermore, in section 4.4 teaches that given URL, the information can be captured on the

associated web page in the registry. Again, this demonstrates that the origin of the document in

the registry may be electronic and not paper. Therefore, the Examiner maintains that the

combination of Robinson and Musk does teach the electronic document not being derived from

the physical document."

In response to the preceding argument by the Examiner relating to Section 4.4, Applicant

asserts that the Examiner has misinterpreted the pertinent portion of Section 4.4 (Robinson, page

6, lines 16-19) which recites: "Other forms of hypertext can be absorbed into the animated paper document system. For example, paper access to the World Wide Web ... is possible through an adaptor. Given a uniform resource locator (URL), this captures the information on the associated web page in the registry. The page can then be printed on paper and links activated by placing the paper on a DigitalDesk and pointing."

Applicant asserts that the preceding quote from Robinson is logically self-consistent if the URLs are the "links activated by placing the paper on a DigitalDesk and pointing". The links (i.e. URLs) are not electronic documents stored in the registry, but rather are interaction objects within the electronic document and may be activated for access to the World Wide Web as explained in the preceding quote in Robinson. Thus the URLs are hypertext objects that are absorbed into electronic documents of the animated paper document system, so that access to the World Wide Web may be activated by being pointed to on paper on a DigitalDesk after the paper is printed from the electronic document containing the URLs.

The Examiner supports Applicant's preceding analysis concerning URLs, by stating on page 28 of the office action: "Robinson teaches in sections 3, 4, 4.1, and 4.4 that the interactor, or link, on the document may point to another document, for example using a URL encoded in the interactor link."

Accordingly, the preceding quote from Section 4.4 of Robinson does not teach that the electronic document is not derived from the physical document.

In summary, Applicant respectfully contends that the Examiner has not cited anything that persuasively supports the Examiner's allegation that Robinson teaches that the electronic

document is not derived from the physical document. All of the Examiner's citations in Robinson are consistent with not teaching that the electronic document is derived from the physical document.

In contrast, the abstract in Robinson explains the essence of Robinson's system: "This paper reports on ways of using digitised video from television cameras in user interfaces for computer systems. The DigitalDesk is built around an ordinary physical desk and can be used as such, but it has extra capabilities. A video camera mounted above the desk, pointing down at the work surface, is used to detect where the user is pointing and **to read documents that are placed on the desk.**" (emphasis added), which clearly teaches deriving an electronic document from a physical document.

As a second example of why claim 1 is not unpatentable over Robinson in view of Musk, Robinson in view of Musk does not teach or suggest the feature: "determining geographic coordinates of the referenced item; defining the geographic link to the physical document; and **encoding the geographic coordinates in the geographic link**" (emphasis added).

As to encoding the coordinates of the referenced item of the electronic document in the link to the physical document, the Examiner argues: "Robinson teaches determining the absolute coordinates of the referenced item in sections 3 and 4.4. Robinson teaches defining a link to the physical document in sections 3, 4, 4.1, and 4.4. Robinson teaches encoding the absolute coordinates in the link in sections 3 and 4.4."

In response, Applicant respectfully contends that Sections 3 and 4.4 of Robinson do not disclose said encoding the absolute coordinates in the link to the physical document as alleged by

the Examiner.

Applicant notes the only mention of co-ordinates in Section 3 of Robinson is : "The page representation acts as an index identifying the interactor corresponding to particular **co-ordinates** on a page" (emphasis added), which most certainly does not disclose encoding the coordinates of the referenced item of the electronic document in the link to the physical document as required by claim 1.

Applicant notes the only mention of co-ordinates in Section 4.4 of Robinson is "The page's identifier and the **co-ordinates** of the link are looked up in the registry to yield the appropriate activity and the results projected back onto the desk" (emphasis added), which most certainly does not disclose encoding the coordinates of the referenced item of the electronic document in the link to the physical document as required by claim 1. In other words, storing the coordinates in the registry does not imply encoding the coordinates in the link. The coordintes could be stored anywhere in the registry not within the link and still be accessible.

In "Response To Arguments", the Examiner argues: "The Examiner's position is that for Robinson to identify the coordinates from the link, as is taught in section 4.4, and use the coordinates to look up in the registry, the coordinates are thus encoded in the link on the document. The Examiner maintains that Robinson does teach determining coordinates of the referenced 'item, defining the link to the physical document, and encoding the coordinates in the link under the broadest reasonable interpretations of coordinates."

In response, Applicant asserts that the Examiner has not cited any language that could be interpreted as teaching or suggesting encoding the coordinates in the link. Applicants reiterate that the coordintes could be stored anywhere in the registry not within the link and still be

accessible.

In "Response To Arguments", the Examiner argues: "Musk does teach a map document which contains reference items related to geographic locations and identified by geographic coordinates in fig. 2 and col. 1 lines 32-57 and therefore suggests modifying Robinson to use and encode geographic coordinates."

In response, Applicant respectfully contends that the preceding statement made by the Examiner does not allege that Musk discloses encoding the geographic coordinates in the geographic link. In addition, Applicant asserts that a teaching of identifying a geographic location through use of geographic coordinates does not suggest encoding the geographic coordinates in a geographic link. Applicant further asserts that Musk does not anywhere suggest encoding the geographic coordinates in a geographic link.

In "Response To Arguments", the Examiner argues: "Robinson devotes section 6 to exploring possible applications for the DigitalDesk ... Therefore, the Examiner maintains that the combination of Robinson and Musk teaches and suggests determining geographic coordinates of the referenced item, defining the geographic link to the physical document, and encoding the geographic coordinates in the geographic link.".

In response, Applicant asserts that teaching mathematics is the only application for the DigitalDesk explored in Section 6 of Robinson, that the combination of Robinson and Musk does not teach or suggest encoding the geographic coordinates in the geographic link.

In "Response To Arguments", the Examiner argues: "Robinson devotes section 6 to exploring possible applications for the DigitalDesk ... Therefore, the Examiner maintains that the combination of Robinson and Musk teaches and suggests determining geographic coordinates of

the referenced item, defining the geographic link to the physical document, and encoding the geographic coordinates in the geographic link."

In response, Applicant asserts that the only application area suggested by Robinson, Section 6 as being suitable for using Robinson's system is the application area of teaching mathematics. Applicant asserts that there is absolutely no suggestion in Section 6 of Robinson of using Robinson's system for applications involving geographic coordinates generally and encoding geographic coordinates in the geographic link more specifically.

Applicant notes that the Examiner has not cited Robinson for a suggestion of the claimed feature of: "encoding the geographic coordinates in the geographic link". Indeed, there is no such suggestion in Robinson. Applicant further notes that the Examiner has not cited Musk for a suggestion of the claimed feature of: "encoding the geographic coordinates in the geographic link". Indeed, there is no such suggestion in Musk. Therefore, the Examiner's suggested modification of Robinson is not obvious.

As a third example of why claim 1 is not unpatentable over Robinson in view of Musk, Robinson in view of Musk does not teach or suggest the feature: "determining geographic coordinates of the referenced item; defining the geographic link to the physical document; and encoding the geographic coordinates in the geographic link".

The Examiner argues: "Robinson does not teach wherein the referenced item is related to a geographic location or wherein the absolute coordinates include geographic coordinates. Musk does teach a map document which contains reference items related to geographic locations and identified by geographic coordinates. The map facilitates a user search of business services in a

particular geographic area. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Musk into Robinson to have created the claimed invention. It would have been obvious and desirable to have used the map and geographic coordinate teachings of Musk to have improved the enhanced document of Robinson so that the paper document of Robinson would have presented a map in paper form which provided geographic coordinates to reference items on the map to help a user find and locate available business services on the map. Robinson teaches in the last three sentences of section 1 that its system has been re-engineered for more general use. Maps are traditionally composed of paper and thus would have been a good candidate for the general use DigitalDesk system taught by Robinson."

In response, Applicant notes that the last three sentences of Robinson, Section 1 recites: "The whole system has now been re- engineered for more general use. In particular, questions of scale and of generality have been addressed. The resulting framework is now being used for further experiments on new applications of the technology." Applicant respectfully contends that the preceding quote from Robinson, in the last three sentences of Section 1, is non-specific, vague, and does not suggest modifying Robinson to "present ... a map in paper form which provided geographic coordinates to reference items on the map to help a user find and locate available business services on the map".

Applicant notes that the Examiner has not cited Robinson for a suggestion that has a relationship to the claimed feature of "determining geographic coordinates of the referenced item; defining the geographic link to the physical document; and encoding the geographic coordinates in the geographic link." Indeed, there is no such suggestion in Robinson. The only

application area suggested by Robinson as being suitable for using Robinson's system is the application area of teaching mathematics (see Robinson Section 6). Therefore, the Examiner's suggested modification of Robinson is not obvious.

Based on the preceding arguments, Applicant respectfully maintains that claim 1 is not unpatentable over Robinson in view of Musk, and that claim 1 is in condition for allowance. Since claims 2-4, 7, 8 and 10 depend from claim 1, Applicant contends that claims 2-4, 7, 8 and 10 are likewise in condition for allowance.

In addition with respect to claim 2, Robinson in view of Musk does not teach or suggest the feature: "wherein the step of encoding further includes the step of encoding an address of a second electronic document in the geographic link".

The Examiner argues: "Regarding dependent claim 2, Robinson teaches encoding an address of a second electronic document in the link in sections 3, 4, 4.1, and 4.4. The electronic document paired with the paper document contains hybrid links composed of the interactor coordinates and the associated target location stored in the registry to point to other electronic resources such as other electronic documents."

In response, Applicant cannot find any disclosure anywhere in Robinson of a geographic link that includes both geographic coordinates and an address of a second electronic document. Since the Examiner has not identified anything in Robinson disclosing a geographic link that includes both geographic coordinates and an address of a second electronic document, Applicant maintains that the Examiner has not established a *prima facie* case of obviousness in relation to

claim 2.

In addition with respect to claim 4, Robinson in view of Musk does not teach or suggest the feature: "storing the geographic coordinates in a table".

The Examiner argues: "Robinson teaches storing the coordinates in a table in sections 3 and 4.4. The each page representation in the registry maintains the associations between the coordinates and the interactors, or reference items, on the page."

In response, Applicant contends that the coordinates are stored in the registry (see Robinson, section 4.4). However, Robinson does not teach that the coordinates are stored in a table. Applicant contends that a table is only one storage format of a multiplicity of storage format that could be used to store data. Applicant has searched the text of Robinson and has found that the word "table" does not appear anywhere within the text of Robinson.

In "Response to Arguments", the Examiner argues: "Robinson teaches in sections 3 and 4.4 that coordinates are stored in the table so that they can be looked up to yield the appropriate activity. Since the coordinates are looked up in the registry table, they must be stored in the table."

In response, Applicants assert that Robinson does not teach in sections 3 and 4.4 that coordinates are stored in the table. Applicants request that the Examiner identify a specific quote in sections 3 and 4.4 of Robinson that allegedly teaches that coordinates are stored in a table.

In addition with respect to claim 7, Robinson in view of Musk does not teach or suggest the feature: "the physical document includes a map".

The Examiner argues: "Regarding dependent claim 7, Robinson does not teach wherein the referenced item is related to a geographic location; the absolute coordinates include geographic coordinates; and wherein the physical document includes a map. Musk does teach a map document which contains reference items related to geographic locations and identified by geographic coordinates. The map facilitates a user search of business services in a particular geographic area.... It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Musk into Robinson to have created the claimed invention. It would have been obvious and desirable to have used the map and geographic coordinate teachings of Musk to have improved the enhanced document of Robinson so that the paper document of Robinson would have presented a map in paper form which provided geographic coordinates to reference items on the map to help a user find and locate available business services on the map. Robinson teaches in the last three sentences of section 1 that its system has been re-engineered for more general use. Maps are traditionally composed of paper and thus would have been a good candidate for the general use DigitalDesk system taught by Robinson."

In response, Applicant notes that the last three sentences of Robinson, Section 1 recites: "The whole system has now been re- engineered for more general use. In particular, questions of scale and of generality have been addressed. The resulting framework is now being used for further experiments on new applications of the technology." Applicant respectfully contends that the preceding quote from Robinson, in the last three sentences of Section 1, is non-specific, vague, and does not suggest modifying Robinson by having the physical document includes a map.

In "Response To Arguments", the Examiner argues: "Robinson devotes section 6 to exploring possible applications for the DigitalDesk .... Therefore, the Examiner maintains that the combination of Robinson and Musk teaches and suggests wherein the physical document includes a map. "

In response, Applicant asserts that the only application area suggested by Robinson, Section 6 as being suitable for using Robinson's system is the application area of teaching mathematics. Applicant asserts that there is absolutely no suggestion in Section 6 of Robinson of using Robinson's system such that "the physical document includes a map".

Applicant notes that the Examiner has not cited Robinson for a suggestion that has a relationship to the claimed feature of: "the physical document includes a map". Indeed, there is no such suggestion in Robinson. Therefore, the Examiner's suggested modification of Robinson is not obvious.

In addition with respect to claim 8, Applicant respectfully contends that Robinson does not teach the feature: "the electronic document is a hyper text markup language document; and the geographic link uses syntactic conventions of hyper text markup language".

The Examiner argues: "Regarding dependent claim 8, Robinson teaches wherein the electronic document is a hyper text markup language document and wherein the link uses syntactic conventions of hyper text markup language in the abstract and sections 4, 4.1, and 4.4.".

In response, Applicant contends that a search of the text of Robinson shows that Robinson does not teach "the geographic link uses syntactic conventions of hyper text markup language". Applicant maintains that the abstract and sections 4, 4.1, and 4.4 in Robinson do not

teach or suggest the preceding feature of claim 8 as alleged by the Examiner.

In "Response To Arguments", the Examiner argues: "Robinson teaches in section 4.4 that the electronic documents maybe imported from HTML documents and therefore teaches the limitations of claim 8."

In response, Applicant contends that Robinson, Section 4.4 does not teach that the electronic documents maybe **imported** from HTML documents, but instead teaches that a document can be **exported** as HTML. Thus, the Examiner has concluded from Section 4.4 of Robinson that Robinson teaches the limitations of claim 8, said conclusion being based on an incorrect understanding of Section 4.4 of Robinson.

In addition with respect to claim 10, Robinson in view of Musk does not teach or suggest the feature: "wherein the geographic coordinates include longitude and latitude" in combination with the feature of "encoding the geographic coordinates in the geographic link".

The Examiner argues: "Regarding dependent claim 10, Robinson does not teach wherein the geographic coordinates include longitude and latitude. Musk does teach wherein the geographic coordinates include longitude and latitude in col. 3 lines 42-44. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Musk into Robinson to have created the claimed invention. It would have been obvious and desirable to have used the longitude and latitude geographic coordinates to have improved Robinson so that the map paper document could have been used and interacted with using the DigitalDesk. Robinson teaches absolute coordinates relating to reference items on the document, but not longitude and latitude geographic coordinates, because Robinson does not specifically

discuss a map example. It would have been obvious and desirable to have enhanced a traditional paper map document with the electronic reference information as taught by Robinson and Musk so that a user could have received detailed information about businesses and services available in the area displayed by the map."

In response, Applicants note that the Examiner has not cited a prior art reference suggesting that encoding the longitude and latitude in the geographic link would enable a user to receive detailed information about businesses and services available in the area displayed by the map. In fact even without reference to prior art, it is not clear as to how encoding the longitude and latitude in the geographic link would enable a user to receive detailed information about businesses and services available in the area displayed by the map. Therefore the Examiner's reason for modifying Robinson by including the preceding feature of claim 10 is not persuasive.

In "Response To Arguments", the Examiner argues: "Musk teaches a map document which contains reference items related to geographic locations and identified by geographic coordinates in fig. 2 and col. 1 lines 32-57 and therefore suggests modifying Robinson to apply the DigitalDesk to animate a map.... Musk does teach wherein the geographic coordinates include longitude and latitude in col. 3 lines 42-44."

In response, Applicant asserts that Musk does not disclose for a suggestion of the claimed feature of encoding the longitude and latitude in the geographic link, as required by claim 10.

In "Response To Arguments", the Examiner argues: "Robinson devotes section 6 to exploring possible applications for the DigitalDesk ... Therefore, the Examiner maintains that the combination of Robinson and Musk teaches and suggests wherein the geographic coordinates

include longitude and latitude."

In response, Applicant asserts that the only application area suggested by Robinson, Section 6 as being suitable for using Robinson's system is the application area of teaching mathematics. Applicant asserts that there is absolutely no suggestion in Section 6 of Robinson of using Robinson's system such that the longitude and latitude is encoded in the geographic link

Applicant notes that the Examiner has not cited Robinson for a suggestion of the claimed feature of encoding the longitude and latitude in the geographic link. Indeed, there is no such suggestion in Robinson. Applicant further notes that the Examiner has not cited Musk for a suggestion of the claimed feature of encoding the longitude and latitude in the geographic link". Indeed, there is no such suggestion in Musk. Therefore, the Examiner's suggested modification of Robinson is not obvious.

Claims 5-6 and 9

The Examiner rejected claims 5-6 and 9under 35 U.S.C. §103(a) as allegedly being unpatentable over Robinson *et al.* (hereinafter "Robinson"), "A framework for interacting with paper", Eurographics '97, Volume 16, Number 3 - [www.cl.cam.ac.uk/Research/Origami/Origami1997c/index.html], pages 1-9 in view of Musk *et al.* (hereinafter "Musk"), US 6,148,260 continuation filed 11/8/1996 and Thompson *et al.* (hereinafter "Thompson"), US 5,986,401 patented 11/16/1999.

Since claims 5-6 and 9 depend from claim 1, which Applicant has argued *supra* to not be unpatentable over Robinson in view of Musk under 35 U.S.C. §103(a), Applicant maintains that

claims 5-6 and 9 are likewise not unpatentable over Robinson in view of Musk and Thompson under 35 U.S.C. §103(a).

In addition with respect to claim 5, Robinson in view of Musk and Thompson does not teach or suggest the feature: "computing foil coordinates on an opto-touch foil from the geographic coordinates of the referenced item and a calibration relationship, said opto-touch foil being aligned on the physical document, said calibration relationship being between geographic coordinates of a selected calibration location and calibration foil coordinates of the selected calibration location on the opto-touch foil, said selected calibration point having been selected from the electronic document and said opto-touch foil having been selectively touched or pressed at a position corresponding to where the calibration location appears in the physical document".

For example, Applicant contends that there is no disclosure in Robinson of any calibration relationship, and specifically there is no disclosure in Robinson of the claimed calibration relationship between geographic coordinates of a selected calibration location and calibration foil coordinates of the selected calibration location on the opto-touch foil. The Examiner has not cited anything in Robinson to support the Examiner's allegations about said calibration relationship in Robinson.

In "Response To Arguments", the Examiner argues: "Robinson shows in figure 2 and describes in section 4.2 that marks on the printed page are used to facilitate the recognition and location on the desktop. Determining the location is the calibration relationship and requires computing coordinates so that the interactors can be correctly recognized."

In response, Applicant acknowledges that the marks on the printed page, as described by Robinson in Section 4.2 in relation to Figure 2, pertains to a calibration relationship. However,

Robinson does not disclose the calibration relationship associated with marks on the printed is "between geographic coordinates of a selected calibration location and calibration foil coordinates of the selected calibration location on the opto-touch foil" as required by claim 5. Thus, Robinson does not teach the claimed calibration relationship.

With respect to the claimed opto-touch foil, the Examiner argues: "Regarding dependent claim 5, Robinson teaches computing camera coordinates from the absolute coordinates of the referenced item in sections 3 and 4.4. Robinson teaches a calibration relationship, the desk being aligned with the physical document, and the calibration relationship being between the absolute coordinates of a selected calibration location and calibration camera coordinates of the selected calibration location on the desk, the selected calibration point having been selected from the electronic document and the desk having been selectively activated at a position corresponding to where the calibration location appears in the physical document in section 4.2. Robinson does not teach computing foil coordinates because Robinson uses a camera location system instead of a touch foil system. However, **Robinson does teach the possibility of using a touch foil to identify coordinates instead of a camera in section 5.** Thus, Robinson teaches that foil coordinates could have been implemented in place of camera coordinates." (emphasis added)

In response, Applicant contends that there is no disclosure in Section 5 of Robinson of "the possibility of using a touch foil to identify coordinates instead of a camera in any calibration relationship". Therefore, the Examiner's conclusion that "Robinson teaches that foil coordinates could have been implemented in place of camera coordinates" is erroneous.

The Examiner further argues: "Robinson does not teach use of an opto-touch foil because

Robinson uses a camera projector system to read input from the user and display feedback to the user. Robinson teaches the consideration of a touch foil alternate position sensing system in section 5. Thompson teaches a transparent organic LED (TOLED) display for presenting feedback to a user in the abstract and fig. 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Thompson and Robinson to have created the claimed invention. It would have been obvious and desirable to have used the touch foil taught by Robinson and the TOLED of Thompson to have improved Robinson so that the position could have been sensed and feedback presented to the user without the user's hand or input pen interfering with either the sight of the input camera or the projection of the feedback projector of Robinson" (emphasis added).

In response, Applicant contends that the Examiner has based the Examiner's argument for utilizing Thompson under the false assumption that "Thompson teaches a transparent organic LED (TOLED) display for presenting feedback to a user in the abstract and fig. 2." Applicant respectfully maintains that Thompson does not teach a transparent organic LED (TOLED) display for presenting feedback to a user. Rather, Thomson teaches use of a low-reflectance absorber arranged behind the TOLED display in order to allows substantially all light incident on the TOLED display to pass through the TOLED display and be absorbed by the low-reflectance absorber, in order to improve the contrast of images displayed by the TOLED display (see Thompson, abstract).

In further response, Applicant contends that Robinson does not teach the consideration of a touch foil alternate position sensing system in section 5, but instead teaches in Section 5 that a graphics tablet could be used. Applicant maintains that a use of a graphics tablet does not imply

or require use of a touch foil system. In addition, Robinson teaches away from use of a graphics tablet by reciting in the third paragraph of Robinson, Section 5: "It would be possible to use a conventional graphics tablet, but the light pen has the advantage that it works perfectly well over a stack of paper on the desk."

In "Response To Arguments", the Examiner argues: "The Examiner maintains the position that the graphics tablet taught by Robinson in section 5 is the claimed touch-foil and believes addition implied evidence that the graphics tablet is a touch foil because Robinson indicates that the graphics tablet might not work well when using a stack of papers. The Examiner believes this implies the touch foil might not accurately assess touches from the pen due to the thickness of the stack of papers."

In response, Applicant asserts that the fact that the graphics tablet might not work well when using a stack of papers does not imply that the graphics tablet taught by Robinson in Section 5 is the claimed touch-foil. In fact, Robinson teaches explicitly in Section 5 that "a pen with a light-emitting diode in its tip is used for pointing ... [because] the light pen has the advantage that it works perfectly well over a stack of paper on the desk". Thus, the Examiner's allegation that Robinson, Section 5 teaches the claimed touch-foil is incorrect. Moreover, Robinson, Section 5 further recites that "[t]his is **recognised by the camera system** and converted to co-ordinates using a transformation calculated by occasional registration", which negates the Examiner's allegation that "Robinson does teach the possibility of using a touch foil to identify coordinates instead of a camera in section 5".

In "Response To Arguments", the Examiner argues: "The Examiner also notes that Robinson teaches providing visual feedback in fig. 1 and section 5. Thompson teaches a TOLED

in the abstract and fig. 2. One of the basic and notoriously well known uses of a display is to provide feedback to a user. Since Robinson teaches providing visual feedback, and Thompson provides an alternate technology for providing the visual feedback, the Examiner maintains that the combination of Robinson, Musk and Thompson teaches and suggests a TOLED display providing feedback to a user."

In response, Applicants assert that Applicant cannot find in Robinson, Figure, 1 a teaching of providing visual feedback to the user. In further response, Applicants assert that Robinson, Section 5 teaches providing visual feedback by the user to the system, but does not teach providing visual feedback to the user, which negates the basis of the Examiner's reason for modifying Robinson to use a TOLED display. In addition, since Robinson's system adequately provides visual feedback to the user, there is no need to modify Robinson to use a TOLED display for the alleged reason of providing visual feedback to the user. Moreover, the Examiner has argued that the TOLED display would replace the camera in Robinson's system, which would destroy Robinson's system since the camera is a fundamental and essential aspect of Robinson's system. For example, see Robinson, abstract, first sentence ("*This paper reports on ways of using digitised video from television cameras in user interfaces for computer systems*" (emphasis added)). There is no suggestion anywhere in Robinson of an alternative to using the camera.

In addition with respect to claim 6, Robinson in view of Musk does not teach or suggest the feature: "storing ... the geographic coordinates in a table".

The Examiner argues: "Robinson teaches ... absolute coordinates in table called a page

representation in section 3 and 4.4."

In response, Applicant contends that there is no disclosure in Robinson that teaches or suggests that a page representation in Robinson's registry comprises a table. Applicant contends that a table is only one storage format of a multiplicity of storage format that could be used to store data. Applicant has searched the text of Robinson and has found that the word "table" does not appear anywhere within the text of Robinson.

In "Response To Arguments", the Examiner argues: "The Examiner maintains that the registry described in section 3 organizes electronic document data and reads upon a table."

In response, Applicant reiterates that there is no disclosure in Robinson that teaches or suggests that a page representation in Robinson's registry comprises a table. Applicant contends that a table is only one storage format of a multiplicity of storage format that could be used to store data. Applicant has searched the text of Robinson and has found that the word "table" does not appear anywhere within the text of Robinson.

The Examiner further argues: "Robinson does not teach storing foil coordinates because Robinson uses a camera location system instead of a touch foil system. However, Robinson does teach the possibility of using a touch foil to identify coordinates instead of a camera in section 5. Thus, Robinson teaches that foil coordinates could have been implemented in place of camera coordinates.... It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the DigitalDesk system of Robinson to have created the claimed invention using the touch foil teaching of Robinson in section 5. It would have been obvious and desirable to have used a touch foil instead of a camera system as taught in Robinson so that the location tracking would not have been disrupted by visually blocking the line of sight

between the camera lens and the stylus accidentally with the users hand or other object."

In response, Applicant contends that the Examiner's suggestion of using the touch foil instead of a camera in Robinson is not persuasive. Robinson does not teach use of foil coordinates in place of camera coordinates as alleged by the Examiner, but instead teaches that a graphics tablet could be used. Applicant maintains that a use of a graphics tablet does not imply or require use of a touch foil system. In addition, Robinson teaches away from use of a graphics tablet by reciting in the third paragraph of Robinson, Section 5: "It would be possible to use a conventional graphics tablet, but the light pen has the advantage that it works perfectly well over a stack of paper on the desk."

In addition with respect to claim 9, Robinson in view of Musk does not teach or suggest the feature: "wherein the opto-foil comprises a touch foil and a transparent light emitting foil such that the touch foil is adapted to being directly touched or pressed and the light emitting foil is disposed between the touch foil and the physical document".

The Examiner argues: "Regarding dependent claim 9, Robinson does not teach use of an opto-touch foil because Robinson uses a camera-projector system to read input from the user and display feedback to the user. However, Robinson does teach the possibility of using a touch foil to identify coordinates instead of a camera in section 5. Thompson teaches a transparent organic LED (TOLED) display for presenting feedback to a user in the abstract and fig. 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Thompson and Robinson to have created the claimed invention. It would have been obvious and desirable to have used the touch foil teaching of Robinson and the TOLED of

Thompson to have improved Robinson so that the position could have been sensed and feedback presented to the user without the user's hand or input pen interfering with either the sight of the input camera or the projection of the feedback projector of Robinson."

In response, Applicant contends that the Examiner's argument is based on use of photo-touch foil coordinates instead of a camera coordinates, which Applicant considers to not be persuasive because Robinson does not teach use of opto-foil coordinates in place of camera coordinates as alleged by the Examiner, but instead teaches that a graphics tablet could be used. Applicant maintains that a use of a graphics tablet does not imply or require use of an opto-touch foil system. In addition, Robinson teaches away from use of a graphics tablet by reciting in the third paragraph of Robinson, Section 5: "It would be possible to use a conventional graphics tablet, but the light pen has the advantage that it works perfectly well over a stack of paper on the desk."

In addition, the Examiner has based the Examiner's argument for utilizing Thompson under the false assumption that "Thompson teaches a transparent organic LED (TOLED) display for presenting feedback to a user in the abstract and fig. 2." Applicant respectfully maintains that Thompson does not teach a transparent organic LED (TOLED) display for presenting feedback to a user. Rather, Thomson teaches use of a low-reflectance absorber arranged behind the TOLED display in order to allows substantially all light incident on the TOLED display to pass through the TOLED display and be absorbed by the low-reflectance absorber, in order to improve the contrast of images displayed by the TOLED display (see Thompson, abstract).

Claims 18-25 and 31-38

The Examiner rejected claims 18-25 and 31-38 under 35 U.S.C. §103(a) as allegedly

being unpatentable over Robinson et al. (hereinafter "Robinson"), "A framework for interacting

with paper", Eurographics '97, Volume 16, Number 3 -

[www.cl.cam.ac.uk/Research/Origami/Origami1997c/index.html], pages 1-9 in view of Musk et

al. (hereinafter "Musk"), US 6,148,260 continuation filed 11/8/1996 and Thompson et al.

(hereinafter "Thompson"), US 5,986,401 patented 11/16/1999.

Applicant respectfully contends that claim 18 is not unpatentable over Robinson in view

of Musk and Thompson because Robinson in view of Musk and Thompson does not teach or

suggest each and every feature of claim 18.

As a first example of why claims 18 and 31 are not unpatentable over Robinson in view

of Musk and Thompson, Robinson in view of Musk and Thompson does not teach or suggest the

feature: "calibrating an opto-touch foil that is aligned on the physical document, said calibrating

comprising processing a calibration location comprised by a plurality of locations appearing in

the physical document and being referred to in an electronic document, ... , said processing

generating a calibration relationship between the geographic coordinates of the calibration

location and calibration foil coordinates of the opto-touch foil, said calibration foil coordinates

corresponding to where the calibration location appears in the physical document".

The Examiner argues: "Robinson teaches calibrating a camera-projector system that is

aligned on a physical document in fig. 1 and section 4.3. Robinson teaches wherein the

calibrating comprises processing a calibration location comprised by a plurality of locations

appearing in the physical document and being referred to in an electronic document in section

fig. 2 and section 4.2". In "Response To Arguments", the Examiner argues: "Robinson shows in figure 2 and describes in section 4.2 that marks on the printed page are used to facilitate the recognition and location on the desktop. Determining the location is the calibration relationship and requires computing coordinates so that the interactors can be correctly recognized."

In response, Applicant acknowledges that the marks on the printed page, as described by Robinson in Section 4.2 in relation to Figure 2, pertains to a calibration relationship. However, Robinson does not disclose the calibration relationship associated with marks on the printed is "between the geographic coordinates of the calibration location and calibration foil coordinates of the opto-touch foil, said calibration foil coordinates corresponding to where the calibration location appears in the physical document" as required by claim 5. In addition, Robinson does not disclose the calibration location comprised by a plurality of locations appearing in the physical document and being referred to in an electronic document. Thus, Robinson does not teach the claimed calibration relationship.

The Examiner additionally argues: "Robinson does not teach use of an opto-touch foil because Robinson uses a camera projector system to read input from the user and display feedback to the user. Robinson teaches the consideration of a touch foil alternate position sensing system in section 5. Thompson teaches a transparent organic LED (TOLED) display for presenting feedback to a user in the abstract and fig. 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Thompson and Robinson to have created the claimed invention. It would have been obvious and desirable to have used the touch foil taught by Robinson and the TOLED of Thompson to have improved Robinson so that the position could have been sensed and feedback presented to the user without

the user's hand or input pen interfering with either the sight of the input camera or the projection

of the feedback projector of Robinson".

In response, Applicant contends that the Examiner's argument is based on use of photo-

touch foil coordinates instead of a camera coordinates, which Applicant considers to not be

persuasive because Robinson does not teach use of opto-foil coordinates in place of camera

coordinates as alleged by the Examiner, but instead teaches that a graphics tablet could be used.

Applicant maintains that a use of a graphics tablet does not imply or require use of an opto- touch

foil system. In addition, Robinson teaches away from use of a graphics tablet by reciting in the

third paragraph of Robinson, Section 5: "It would be possible to use a conventional graphics

tablet, but the light pen has the advantage that it works perfectly well over a stack of paper on the

desk."

In addition, the Examiner has based the Examiner's argument for utilizing Thompson under

the false assumption that "Thompson teaches a transparent organic LED (TOLED) display for

presenting feedback to a user in the abstract and fig. 2." Applicant respectfully maintains that

Thompson does not teach a transparent organic LED (TOLED) display for presenting feedback to

a user. Rather, Thomson teaches use of a low-reflectance absorber arranged behind the TOLED

display in order to allows substantially all light incident on the TOLED display to pass through

the TOLED display and be absorbed by the low-reflectance absorber, in order to improve the

contrast of images displayed by the TOLED display (see Thompson, abstract).

As a second example of why claims 18 and 31 are not unpatentable over Robinson in

view of Musk and Thompson, Robinson in view of Musk and Thompson does not teach or

suggest the feature: "said electronic document not being derived from the physical document".

The Examiner argues: "Robinson teaches that the electronic document is not derived from the physical document in section 4.1. Robinson describes here that animated documents are created with a fairly conventional WYSIWYG editor. Thus, the electronic document is created with electronic document editing software and thus is not necessarily derived from a physical document.

In response with respect to Section 4.1, Applicant respectfully contends that Section 4.1 of Robinson first describes the use of a conventional WYSIWYG editor to create an animated document as is known in the prior art: "Animated documents are created with a fairly conventional WYSIWYG editor. Text and diagrams are entered and amended in the usual way, building up a collection of rendering information in primary pseudo-window leaves." Robinson does not disclose that such a conventional WYSIWYG editor is used to create animated documents for Robinson's Registry in the absence of a corresponding physical document from which the electronic animated document is derived. Indeed, Robinson, Section 4.1 further recites: "One version of the editor actually operates on the DigitalDesk, which means that text, diagrams and interactors from other printed documents can be copied into the new document. If the other printed documents are active documents known to the system, this copying is entirely digital, just as it would be in a conventional word processor."

In other words, Robinson does not disclose the use of a conventional WYSIWYG editor independent of a physical document from which the electronic animated document is derived, as confirmed by the following recitation the first paragraph of Robinson, Section 3: "The registry provides the central directory service for animated paper documents. **It stores the image of each**

active document and the code of any interactors, together with cross references between these and indexes to identify them" (emphasis added). Since the registry stores **the image of each active document**, there is no electronic animated document in the Registry that is not derived from an associated physical document. Therefore, any use of the conventional WYSIWYG editor to create an animated document for the Registry generates content in the animated document that is derived from the corresponding physical document.

In summary, Applicant respectfully contends that the Examiner has not cited anything that persuasively supports the Examiner's allegation that Robinson teaches that the electronic document is not derived from the physical document. All of the Examiner's citations in Robinson are consistent with not teaching that that the electronic document is derived from the physical document.

In contrast, the abstract in Robinson explains the essence of Robinson's system: "This paper reports on ways of using digitised video from television cameras in user interfaces for computer systems. The DigitalDesk is built around an ordinary physical desk and can be used as such, but it has extra capabilities. A video camera mounted above the desk, pointing down at the work surface, is used to detect where the user is pointing and **to read documents that are placed on the desk**." (emphasis added), which clearly teaches deriving an electronic document from a physical document.

As a third example of why claims 18 and 31 are not unpatentable over Robinson in view of Musk and Thompson, Robinson in view of Musk and Thompson does not teach or suggest the feature: "for each location of the plurality of locations, computing foil coordinates of the opto-

touch foil corresponding to where each location appears in the physical document, said computing utilizing the geographic coordinates of each location and the calibration relationship".

The Examiner argues: "Robinson teaches for each location of the plurality of locations, computing camera coordinates of the camera-projector system corresponding to where each location appears in the physical document, the computing utilizing the absolute coordinates of each location and the calibration relationship in fig. 2 and sections 4.2 and 5."

In response, Applicant respectfully contends that there is no disclosure in Robinson that the computing of camera coordinates of the camera-projector system corresponding to where each location appears in the physical document utilizes the absolute coordinates of each location and the calibration relationship. Although the Examiner alleges that said "computing" is disclosed in Robinson, the Examiner has been unable to cite any text in Robinson that actually discloses said computing. Therefore, Applicant reiterates that Robinson in view of Musk and Thompson does not teach or suggest the preceding feature of claims 18 and 31.

Based on the preceding arguments, Applicant respectfully maintains that claims 18 and 31 are not unpatentable over Robinson in view of Musk, and that claims 18 and 31 are in condition for allowance. Since claims 19-25 depend from claim 18, Applicant contends that claims19-25 are likewise in condition for allowance. Since claims 32-38 depend from claim 31, Applicant contends that claims 32-38 are likewise in condition for allowance.

In addition with respect to claims 19 and 32, Robinson in view of Musk does not teach or suggest the feature: "storing in a table for each location of the plurality of locations: an identifier

of each location, the geographic coordinates of each location, and the foil coordinate of each location".

The Examiner argues: "Regarding dependent claim 19, Robinson teaches storing an identifier of each location, the absolute coordinates of each location, and the camera coordinates of each location in a table in sections 3 and 4.4. The each page representation in the registry maintains the associations between the coordinates and the interactors, or reference items, on the page. Robinson teaches storing camera coordinates in table called a page representation in section 3 and 4.4. Robinson does not teach storing foil coordinates because Robinson uses a camera location system instead of a touch foil system. Robinson teaches the consideration of a touch foil alternate position sensing system in section 5. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the touch foil teaching of Robinson into the DigitalDesk system of Robinson to have created the claimed invention. It would have been obvious and desirable to have used a touch foil instead of a camera system as taught in Robinson so that the location tracking would not have been disrupted by visually blocking the line of sight between the camera lens and the stylus accidentally with the users hand or other object.".

In response, Applicant respectfully contends that there is no disclosure in Robinson that teaches or suggests that a page representation in Robinson's registry comprises a table. Applicant contends that a table is only one storage format of a multiplicity of storage format that could be used to store data. Applicant has searched the text of Robinson and has found that the word "table" does not appear anywhere within the text of Robinson.

In addition, Applicant contends that the Examiner's suggestion of using the touch foil

instead of a camera in Robinson is not persuasive. Robinson does not teach use of foil

coordinates in place of camera coordinates as alleged by the Examiner, but instead teaches that a

graphics tablet could be used. Applicant maintains that a use of a graphics tablet does not imply

or require use of a touch foil system. In addition, Robinson teaches away from use of a graphics

tablet by reciting in the third paragraph of Robinson, Section 5: "It would be possible to use a

conventional graphics tablet, but the light pen has the advantage that it works perfectly well over

a stack of paper on the desk."

In addition with respect to claims 20 and 35, Robinson in view of Musk does not teach or

suggest the feature: "sending the computed foil coordinates to the opto-touch foil to cause

illumination of positions upon the opto-touch foil corresponding to where each location of the

plurality of locations appears in the physical document".

The Examiner argues: "Regarding dependent claim 20, Robinson teaches sending

coordinates to the projector that illuminates a corresponding position on the physical document

responsive to the projector coordinates. Robinson does not teach use foil coordinates or an

opto-touch foil because Robinson uses a camera-projector system to read input from the user and

display feedback to the user. Robinson teaches the consideration of a touch foil alternate position

sensing system in section 5. Thompson teaches a transparent organic LED (TOLED) display for

presenting feedback to a user in the abstract and fig. 2. It would have been obvious to one of

ordinary skill in the art at the time the invention was made to have combined the teachings of

Thompson and Robinson to have created the claimed invention. It would have been obvious and

desirable to have used the touch foil taught by Robinson and the TOLED of Thompson to have

improved Robinson so that the position could have been sensed and feedback presented to the user without the user's hand or input pen interfering with either the sight of the input camera or the projection of the feedback projector of Robinson.".

In response, Applicant respectfully contends that the Examiner's suggestion of using the touch foil instead of a camera in Robinson is not persuasive. Robinson does not teach use of foil coordinates in place of camera coordinates as alleged by the Examiner, but instead teaches that a graphics tablet could be used. Applicant maintains that a use of a graphics tablet does not imply or require use of a touch foil system. In addition, Robinson teaches away from use of a graphics tablet by reciting in the third paragraph of Robinson, Section 5: "It would be possible to use a conventional graphics tablet, but the light pen has the advantage that it works perfectly well over a stack of paper on the desk."

Moreover, the Examiner has not cited any reference that discloses having an opto-touch foil cause illumination of positions upon the opto-touch foil corresponding to where each location of the plurality of locations appears in the physical document. Also, the Examiner has not provided any evidence from the prior art that provides motivation for having an opto-touch foil cause illumination of positions upon the opto-touch foil corresponding to where each location of the plurality of locations appears in the physical document.

In addition, the Examiner has based the Examiner's argument for utilizing Thompson under the false assumption that "Thompson teaches a transparent organic LED (TOLED) display for presenting feedback to a user in the abstract and fig. 2." Applicant respectfully maintains that Thompson does not teach a transparent organic LED (TOLED) display for presenting feedback to a user. Rather, Thomson teaches use of a low-reflectance absorber arranged behind

the TOLED display in order to allows substantially all light incident on the TOLED display to pass through the TOLED display and be absorbed by the low-reflectance absorber, in order to improve the contrast of images displayed by the TOLED display (see Thompson, abstract).

In addition with respect to claims 21 and 36, Robinson in view of Musk does not teach or suggest the feature: "responsive to a first location of the plurality of locations being selected in the electronic document, sending the foil coordinates of the first location to the opto-touch foil to cause blinking of light at a first position upon the opto-touch foil corresponding to where the first location appears in the physical document".

The Examiner argues: "Regarding dependent claim 21, Robinson teaches responsive to a first location of the plurality of locations being selected in the electronic document, sending the coordinates of the first location to the camera-projector system to cause an animation, which **could be** a blinking of light, at a first position upon the DigitalDesk corresponding to where the first location appears in the physical document in sections 3, 4.3, and 5" (emphasis added).

In response, Applicant respectfully maintains that the Examiner's contention that an animation in Robinson "could be a blinking light" is speculative and thus not persuasive for demonstrating that Robinson teaches or suggests having "an opto-touch foil to cause blinking of light at a first position upon the opto-touch foil corresponding to where the first location appears in the physical document"

In addition with respect to claims 22 and 33, Robinson in view of Musk does not teach or suggest the feature: "storing an address of a second electronic document in the table".

The Examiner argues: "Regarding dependent claim 22, Robinson teaches storing an address of a second electronic document in the table in sections 3 and 4.4.".

In response, Applicant respectfully contends that the preceding argument by the Examiner is incorrect, because Robinson does not teach storing an address of a second electronic document in the table in sections 3 and 4.4.

In addition with respect to claims 24 and 35, Robinson in view of Musk does not teach or suggest the feature: "wherein the opto-foil comprises a touch foil and a transparent light emitting foil such that the touch foil is adapted to being directly touched or pressed and the light emitting foil is disposed between the touch foil and the physical document".

The Examiner argues: "Regarding dependent claims 24, Robinson does not teach use of an opto-touch foil because Robinson uses a camera-projector system to read input from the user and display feedback to the user. Robinson teaches the consideration of a touch foil alternate position sensing system in section 5. Thompson teaches a transparent organic LED (TOLED) display for presenting feedback to a user in the abstract and fig. 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Thompson and Robinson to have created the claimed invention. It would have been obvious and desirable to have used the touch foil teaching of Robinson and the TOLED of Thompson to have improved Robinson so that the position could have been sensed and feedback presented to the user without the user's hand or input pen interfering with either the sight of the input camera or the projection of the feedback projector of Robinson."

In response, Applicant respectfully contends that the Examiner's suggestion of using the

touch foil instead of a camera in Robinson is not persuasive. Robinson does not teach use of foil coordinates in place of camera coordinates as alleged by the Examiner, but instead teaches that a graphics tablet could be used. Applicant maintains that a use of a graphics tablet does not imply or require use of a touch foil system. In addition, Robinson teaches away from use of a graphics tablet by reciting in the third paragraph of Robinson, Section 5: "It would be possible to use a conventional graphics tablet, but the light pen has the advantage that it works perfectly well over a stack of paper on the desk."

In addition, the Examiner has based the Examiner's argument for utilizing Thompson under the false assumption that "Thompson teaches a transparent organic LED (TOLED) display for presenting feedback to a user in the abstract and fig. 2." Applicant respectfully maintains that Thompson does not teach a transparent organic LED (TOLED) display for presenting feedback to a user. Rather, Thomson teaches use of a low-reflectance absorber arranged behind the TOLED display in order to allows substantially all light incident on the TOLED display to pass through the TOLED display and be absorbed by the low-reflectance absorber, in order to improve the contrast of images displayed by the TOLED display (see Thompson, abstract).

In addition with respect to claims 25 and 38, Robinson in view of Musk does not teach or suggest the feature: "responsive to the opto-touch foil being pressed or touched at a first position corresponding to where a first location of the plurality of locations appears in the physical document, causing a blinking of light at the first position and highlighting the first location in the electronic document".

The Examiner argues: "Regarding dependent claim 25, Robinson teaches responsive to

the DigitalDesk being activated at a first position corresponding to where a first location of the plurality of locations appears in the physical document, causing an animation, which **could be** a blinking of light, at the first position and highlighting the first position in the electronic document in sections 3, 4.3, and 5" (emphasis added).

In response, Applicant respectfully maintains that the Examiner's contention that an animation in Robinson "could be a blinking light" is speculative and thus not persuasive for demonstrating that Robinson teaches or suggests "responsive to the opto-touch foil being pressed or touched at a first position corresponding to where a first location of the plurality of locations appears in the physical document, causing a blinking of light at the first position and highlighting the first location in the electronic document."

CONCLUSION

Based on the preceding arguments, Applicant respectfully believes that all pending claims and the entire application meet the acceptance criteria for allowance and therefore request favorable action. If the Examiner believes that anything further would be helpful to place the application in better condition for allowance, Applicant invites the Examiner to contact Applicant's representative at the telephone number listed below. The Director is hereby authorized to charge and/or credit Deposit Account No. 09-0457.

Date: 05/15/2006

Jack P. Friedman
Registration No. 44,688

Schmeiser, Olsen & Watts
22 Century Hill Drive - Suite 302
Latham, New York 12110
(518) 220-1850